

CLAIMS:

1. A light emitting device comprising
a light emitting component; and
a phosphor capable of absorbing a part of light emitted by the
light emitting component and emitting light of wavelength different from
that of the absorbed light,

wherein a straight line connecting a point of chromaticity
corresponding to a peak of the spectrum generated by the light emitting
component and a point of chromaticity corresponding to a peak of the
spectrum generated by the phosphor is along with the black body radiation
locus in the chromaticity diagram.

2. The light emitting device according to claim 1,
wherein said light emitting component is a blue LED.

3. The light emitting device according to claim 1,
wherein said point of chromaticity corresponding to a peak of the
spectrum generated by the light emitting component, said point of
chromaticity corresponding to a peak of the spectrum generated by the
phosphor and contents of the phosphor are adjusted so that said straight
line is along with the black body radiation locus.

4. The light emitting device according to claim 1,
wherein said straight line contains a point corresponding to a
color temperature of 8080K or 4400K.

5. The Light emitting device according to claim 1,
wherein main emission peak of the light emitting component is set within the range from 400nm to 530 nm.
6. The light emitting device according to claim 1,
wherein main emission peak of the light emitting component is set within the range from 420 nm to 490 nm.
7. The light emitting device according to claim 1,
wherein main emission peak of the light emitting component is set within the range from 450 nm to 475 nm.
8. The light emitting device according to claim 1,
wherein the structure of the light emitting component is either one structure of homostructure, heterostructure and double-heterostructure which have MIS junction, PIN junction or PN junction.
9. The light emitting device according to claim 1,
wherein said light emitting component comprises an active layer having a single quantum well structure or multi quantum well structure.
10. The light emitting device according to claim 1,
wherein said phosphor is made by steps of solving rare earth elements in acid in stoichiometrical proportions, coprecipitating the solution with oxalic acid to obtain a sediment, firing the sediment to obtain an oxide, and firing a mixture of said oxide, an ammonium fluoride and aluminum oxide.

11. The light emitting device according to claim 1,
wherein emission peak of the phosphor is set within the range from
530 nm to 570 nm.